

What is claimed is:

1. A method for parallel type interference cancellation in a CDMA receiver, the method comprising the steps of:

5 (a) when an over sample position of a received signal reaches the end of a symbol of a user, completing temporary detecting and recovering the symbol of the user;

(b) generating a residual signal by using the recovered signal of the user and received signal state; and

10 (c) detecting symbol information by obtaining an interference cancelled signal by adding the residual signal to the recovered signal of the user.

2. The method as recited in claim 1, further comprising
15 the step of:

(d) repeating from the recovering the symbol of the step (a) by using the detected result of detecting the step (c) as a temporary detection result to raise accuracy of signal detection.

20 3. The method as recited in claim 1, wherein the step (a) includes:

(a1) checking whether the end of the symbol of the user, and, if the end of the symbol of the user is not received,
25 receiving a signal; and, otherwise, performing temporary detecting for the symbol of the user, and

(a2) obtaining the recovered signal by adjusting the

amplitude and the phase information of the temporarily detected signal.

4. The method as recited in claim 1, wherein the step (b)
5 includes:

(b1) for a time point at which the recovered signals of the users are available, adding the recovered signals of the users on an axis equal to the received signal state, to the time point;

10 (b2) generating the residual signal by subtracting the added signal from the received signal.

5. The method as recited in claim 1, wherein the step (c) includes:

15 (c1) adding the recovered signals of the users on an axis equal to the received signal state, only to a time point at which the length of the residual signal is enough to detect the symbol of the user;

(c2) detecting the symbol by performing matched filtering
20 and converting for the detected signal.

6. The method as recited in claim 1, wherein the lengths of the symbols are equal to each other in the received signal.

25 7. The method as recited in claim 1, wherein the lengths of the symbols are different from each other in the received signal.

8. A computer readable recording medium storing instructions for executing a method for parallel type interference cancellation in a parallel type interference canceller of a CDMA receiver, the parallel type interference canceller having a micro-processor, the method comprising the
5 steps of:

(a) when an over sample position of a received signal reaches the end of a symbol of a user, completing temporary detecting and recovering the symbol of the user;

10 (b) generating a residual signal by using the recovered signal of the user and received signal state; and

(c) detecting symbol information by obtaining an interference cancelled signal by adding the residual signal to the recovered signal of the user.